

## PATENT

**C. REMARKS**

Claims 2-11, 13-20, and 22-29 are pending in the present application. Claims 2-4, 7-11, 13-15, 18-20, 23-24, and 27-29 have been amended. Claims 1, 12, and 21 have been canceled. Reconsideration of the claims is respectfully requested.

Applicants would like to thank the Examiner for his courtesy in extending to Applicants an interview on November 20, 2003. During the interview, the prior art rejections in view of FARBER, LOGUE, and ELLEDGE were discussed, as detailed below.

35 U.S.C. § 112, second paragraph, Definiteness: Claims 3, 14, and 23

The Examiner rejected claims 3, 14, and 23 under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter that Applicants regard as the invention. This rejection is respectfully traversed.

Specifically, claims 3, 14, and 23 were rejected for reciting the limitation "the plurality of servers" without antecedent basis. Applicants have amended claims 3, 14, and 23 to instead recite "the plurality of proxy servers," which has proper antecedent basis in independent claims 4, 15, and 24, as amended. Applicants therefore respectfully request that the rejection be withdrawn.

35 U.S.C. § 102(e), Anticipation

The Examiner rejected claims 1-3, 9, 12-14, and 21-23 under 35 U.S.C. § 102(e) as being anticipated by US 6185598 (FARBER) FEB 6, 2001. This rejection is respectfully traversed.

Applicants have canceled claims 1, 12, and 21 and have amended claims 2-3, 9, 13-14, and 22-23 to be dependent on claims 4, 15, 24, which have now been placed in independent form. Applicants therefore respectfully submit that the rejection of claims 1, 12, and 21 is now moot in view of Applicants' amendments and that claims 2-3, 9, 13-14, and 22-23 should now be reconsidered in view of Applicants' arguments concerning claims 4, 15, and 24 as outlined below.

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35 U.S.C. § 103(a), Obviousness

The Examiner rejected claim 10 under 35 U.S.C. § 103(a) as being obvious in view of US 6185598 (FARBER) FEB 6, 2001, claims 4-5, 11, 15-16, 20, 24-25, and 29 as being obvious in view of US 6185598 (FARBER) FEB 6, 2001 and US 6330606 (LOGUE) DEC 11, 2001, claims 8, 19, and 28 as being obvious in view of US 6185598 (FARBER) FEB 6, 2001 and US 6044399 (ELLEDGE) MAR 28, 2000, and claims 6, 17, and 26 as being obvious in view of US 6185598 (FARBER) FEB 6, 2001, US 6330606 (LOGUE) DEC 11, 2001 and US 6044399 (ELLEDGE) MAR 28, 2000. The rejections are respectfully traversed.

With regard to claim 4, the Examiner stated in the Office Action at p. 6:

15. Referring to claim 4, Farber discloses a method of selecting a proxy server as stated in the claims above. Furthermore Farber discloses receiving a destination address (e.g. abstract). Farber does not disclose comparing the destination address to a plurality of network addresses, each of the network addresses corresponding with a proxy server identifier. In analogous art, Logue discloses another method of selecting a proxy server where the destination address (i.e. URL) is compared to a plurality of network addresses (a hashing function as taught by Logue transforms each URL into a "key", which is mapped to a specific proxy server, which is then returned to the client), each of the network addresses corresponding with a proxy server identifier (e.g. abstract, Figure 10, col 10, lines 30-65). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Logue with Farber to efficiently provide mutually exclusive portions of the Internet's contents to particular proxy servers, thereby reducing redundancy of information and reducing overall load on the servers as supported by Logue (e.g. abstract, col 1, lines 60-67).

As discussed in the November 20, 2003 interview, none of the cited references teaches or suggests the feature of "comparing the destination address to a plurality of network addresses, each of the network addresses corresponding with a proxy server identifier," which is recited in each of (now independent) claims 4, 15, and 24. The Examiner correctly noted in the Office Action that FARBER fails to teach or suggest this feature. Applicants respectfully submit that neither LOGUE nor ELLEDGE teach or suggest this feature, either.

As the Examiner observed, LOGUE describes choosing a proxy server based on a destination address of a request. The manner in which LOGUE chooses a proxy server based on the destination address, however, is quite different from that recited in claims 4, 15, and 24.

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Unlike the presently claimed invention, which *compares* a destination address to a plurality of network addresses, the LOGUE invention instead computes a hash function that maps the destination address to exactly one of a plurality of proxy servers, as in the below excerpt from LOGUE:

FIG. 9 is a data flow diagram illustrating the interaction of proxy components according to another embodiment of the present invention. In this embodiment, proxy 900 includes a plurality of proxy servers 405 communicatively coupled to a dispatcher 910 and a hit accumulator server 415. Rather than allowing a given proxy server's cached contents to be determined based upon the requests of an associated client, the content of the Web can be distributed among proxy servers 405 by a hash algorithm executed by the dispatcher 910. The hash algorithm preferably maps a given URL to one and only one of the plurality of proxy servers 405. This can be accomplished using a portion of the output of a secure hash algorithm such as the Message Digest 5 (MD5) hash algorithm. The hash algorithm can be thought of as a mechanism for assigning a range of URLs to each of the proxy servers 405 in the proxy 900. [col. 9, line 55 – col. 10, line 3].

A hash algorithm or hash function, as described in LOGUE, maps destination addresses into corresponding proxy servers *without* comparing addresses, unlike the present invention as recited in claims 4, 15, and 24. Instead, the LOGUE hash algorithm *directly computes* a proxy server identifier by applying a mathematical hash function to the destination address. Since, in LOGUE, the proxy server identifier for the proper proxy server is simply computed from the destination address, there is no need to compare the destination address to any other addresses in order to determine which proxy server to use. Thus, not only does LOGUE fail to teach or suggest the claimed feature of comparing the destination address to a plurality of network addresses, but one of ordinary skill in the art would not be motivated to modify LOGUE so as to include such a comparison step, as such a step would be superfluous in the context of LOGUE.

ELLEDGE also fails to teach or suggest the claimed feature of "comparing the destination address to a plurality of network addresses, each of the network addresses corresponding with a proxy server identifier." ELLEDGE teaches determining a preferred server for a client based on configuration information associated *with that client*. Although the address of the client is among the configuration options that is considered when choosing an appropriate server to use, it should be noted that the address of the client is the *source address* of that client's requests and not the *destination address*, as recited in the claims 4, 15, and 24. Thus, as

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ELLEDGE chooses a server on the basis of a *source* address, rather than a destination address, ELLEDGE fails to teach or suggest all of the features of claims 4, 15, and 24.

Claims 2-3, 5-6, 8-11, 13-14, 16-17, 19-20, 22-23, 25-26, and 28-29 are dependent claims that depend on independent claims 4, 15, and 24. Applicants have already demonstrated claims 4, 15, and 24 to be in condition for allowance. Applicants respectfully submit that claims 2-3, 5-6, 8-11, 13-14, 16-17, 19-20, 22-23, 25-26, and 28-29 are also allowable, at least by virtue of their dependency on allowable claims.

Furthermore, claims 2-3, 5-6, 8-11, 13-14, 16-17, 19-20, 22-23, 25-26, and 28-29 recite additional subject matter not suggested by the cited reference. For instance, claim 6 recites "returning a default proxy server identifier in response to the received destination address not matching any of the network addresses." Although the Examiner argues that claim 6 may be achieved by combining FARBER with ELLEDGE and LOGUE, Applicants respectfully submit that the use of a hash function to choose a proxy server, as described in LOGUE, would not result in a "no-match" condition, since the result of applying a hash function is to map *every* possible address into exactly one proxy server through calculating the hash function. Moreover, since no address comparisons need be made in order to apply a hash function, the concept of the destination address "matching" or "not matching" another network address simply does not apply in LOGUE.

For the foregoing reasons, Applicants submit that claims 2-6, 8-11, 13-17, 19-20, 22-26, and 28-29 are patentable over the references. Accordingly, Applicants respectfully request that claims 2-6, 8-11, 13-17, 19-20, 22-26, and 28-29 be allowed.

Objections to Claims

The Examiner has stated that claims 7, 18, and 27 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, the claims have been rewritten to overcome this objection.

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Conclusion

As a result of the foregoing, it is asserted by Applicants that the remaining claims in the Application are in condition for allowance, and Applicants respectfully request an early allowance of such claims.

Applicants respectfully request that the Examiner contact the Applicants' attorney listed below if the Examiner believes that such a discussion would be helpful in resolving any remaining questions or issues related to this Application.

Respectfully submitted,

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